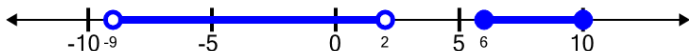Name _____

Function Domain/Range Definition - Number Line to Set Builder (With Union)

1 What set describes the domain on this number line?
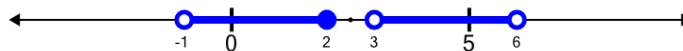

A $\{X \in \mathbb{R}|-9 < X < 2 \text{ or } 6 < X \le 10\}$

B $\{X \in \mathbb{R}|-9 < X < 2 \text{ or } 6 \le X \le 10\}$

2 What set describes the range on this number line?
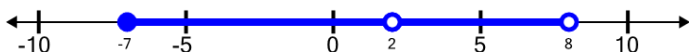

A $\{Y \in \mathbb{R}|-1 \le Y < 2 \text{ or } 3 \le Y \le 6\}$

B $\{Y \in \mathbb{R}|-1 < Y \le 2 \text{ or } 3 < Y < 6\}$

3 What set describes the domain on this number line?

A $\{X \in \mathbb{R}|-7 \le X < 2 \text{ or } 2 \le X\}$

B $\{X \in \mathbb{R}|-7 \le X < 2 \text{ or } 2 < X < 8\}$

4 What set describes the domain on this number line?

A $\{X \in \mathbb{R}|-4 < X \le 2 \text{ or } 5 < X \le 10\}$

B $\{X \in \mathbb{R}|-4 < X \le 2 \text{ or } 5 < X\}$
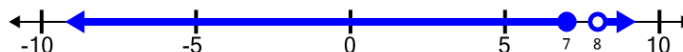
5 What set describes the domain on this number line?

A $\{X \in \mathbb{R}|2 < X < 5 \text{ or } 9 \le X\}$

B $\{X \in \mathbb{R}|2 \le X \le 5 \text{ or } 9 \le X\}$

6 What set describes the domain on this number line?

A $\{X \in \mathbb{R}|X \le 7 \text{ or } 8 < X\}$

B $\{X \in \mathbb{R}|4 < X < 7 \text{ or } 8 \le X < 13\}$

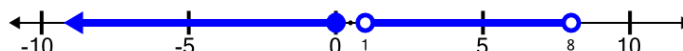**7** What set describes the domain on this number line?

A $\{X \in \mathbb{R}|-7 < X \le -2 \text{ or } -1 < X \le 3\}$

B $\{X \in \mathbb{R}|-7 \le X \le -2 \text{ or } -1 \le X < 3\}$

8 What set describes the domain on this number line?

A $\{X \in \mathbb{R}|X \le 0 \text{ or } 1 < X < 8\}$

B $\{X \in \mathbb{R}|-9 \le X \le 0 \text{ or } 1 \le X \le 8\}$